MRI of the Spine Patient Education

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When an MRI (or X-ray, or CT scan) of the spine is obtained, the findings of that study *must* be taken in context. As we age, our spine develops new imaging findings on MRI. While these findings can sound worrisome on an MRI report, they are often simply part of the normal aging process and are found in people who have no symptoms! Most of these findings can be compared to wrinkles that one gets on their skin - benign in nature and just a normal part of aging. As you can see in the table below, an MRI with no findings would actually be abnormal for many individuals. As a spine care physician, I use the MRI and your symptoms to make a more informed diagnosis and develop a more defined treatment plan that will work best for you.

A recent peer-reviewed article summarizing the existing literature regarding this very issue (Brinjikjia et al., 2015) evaluated 33 different articles reporting imaging findings for 3,110 asymptomatic individuals. From this comprehensive review, the following table was created, which shows age-specific prevalence estimates of "degenerative" spine imaging findings in asymptomatic individuals:

	Age (Yr)						
	20	**30**	**40**	**50**	**60**	**70**	**80**
Imaging Finding							
Disk degeneration	37%	52%	68%	80%	88%	93%	96%
Disk signal loss	17%	33%	54%	73%	86%	94%	97%
Disk height loss	24%	34%	45%	56%	67%	76%	84%
Disk bulge	30%	40%	50%	60%	69%	77%	84%
Disk protrusion	29%	31%	33%	36%	38%	40%	43%
Annular fissure	19%	20%	22%	23%	25%	27%	29%
Facet degeneration	4%	9%	18%	32%	50%	69%	83%
Spondylolisthesis	3%	5%	8%	14%	23%	35%	50%

In summary, degeneration of the spine is normal and expected. It is only when a pain correlates specifically with imaging findings that it becomes something to necessary to treat specifically.